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 Modified zeolite for hydrocarbon prodn. - obid. by ion-exchanging
 monoclinic aluminosilicate to obtain lower olefin(s) e.g. ethylene,
 propylene in high yield

C84-001460

A modified zeolite (I) is claimed, prep'd.
 by ion-exchanging a monoclinic aluminosilicate (II) which
 has the compsn. (expressed as oxide mole ratios).

 $0.8 - 1.5M_i/nO \cdot Al_2O_3 \cdot 10-100SiO_2 \cdot ZH_2O$

(in which M is at least one metal cation; n is valency of
 M; and Z is 0-40); and the X-ray diffraction pattern
 given in Table I; at least part of M being opt. substd. by
 an ion-exchange with IIA or IIB metal cpd. (III).

A(1-D13) E(10-J2C, 31-P2) H(4-E, 4-F2E) J(4-E4) N(6-A)

200

Table I

<u>lattice plate distance d (Å)</u>	<u>relative strength</u>
11.2 \pm 0.2	S.
10.1 \pm 0.2	S.
7.5 \pm 0.15	W.
6.03 \pm 0.1	M.
3.86 \pm 0.05	V.S.
3.82 \pm 0.05	S.
3.72 \pm 0.05	S.
3.64 \pm 0.05	S.

Also claimed is a method of converting hydrocarbon
 using (I).

USES/ADVANTAGES

Catalytic activity of (I) degrades little, so that lower
 olefins, e.g. ethylene, propylene, are obtd. selectively
 at high yield.

DETAILS

M is a cation pref. selected from Li, Ba, Ca and Sr.
 (III) is at least one Mg, Ca or La cpd.
 The hydrocarbons converted in the process are <4C
 alcohols or ethers; e.g. methanol, ethanol, dimethyl-
 ether, etc. Reaction is at 0.1-50 atm. and 275-550°C.
 (-ppRHdwgNo0/0).

Equivalents:
 J91039970-B